WHAT IS CLAIMED IS:

1. A spread spectrum receiver, comprising:

means for correlating a received, code modulated spread spectrum signal with a code modulated signal replica at a first selected code phase delay and at a second selected code phase delay; and

comparison means for comparing characteristics of said correlations to derive information related to any residual code phase error in said second code phase delay.

2. The invention of claim 1, wherein said first code phase delay is selected to have a characteristic having a first known relationship to a characteristic of said third code phase delay.

3. The invention of claim 2, wherein said first known relationship between characteristics of said first and third code phase delays includes a second known relationship between any correlation of said received signal with said replica at said first and third code phase delays.

4. The invention of claim 3, wherein said characteristics are correlation magnitudes.

5. The invention of claim 4, wherein said second known relationship is equality.

6. The invention of claim 2, wherein said first known relationship includes a third known relationship related to magnitudes of said first and third code phase delays.

7. The invention of claim 6, wherein said third known relationship is that the magnitudes of said first and third code phase delays differ by a predetermined magnitude proportional to a chip of said code modulation.

8. The invention of claim 6, wherein predetermined magnitude is the width of one chip of said code modulation.

9. The invention of claim 8, wherein said second code phase delay is midway between said first and third code phase delays.

10. The invention of claim 1, wherein said comparison means further comprises:

error means for determining the existence of residual code phase lead or lag error.

11. The invention of claim 10, wherein said error means further comprises:

means for determining the existence of multipath interference in said received, code modulated spread spectrum signal causing a residual code phase lag error if the magnitude of the correlation product at the second selected code phase delay is less than twice the magnitude of the correlation product at the first selected code phase delay.

12. The invention of claim 10, wherein said error means further comprises:

means for determining the existence of multipath interference in said received, code modulated spread spectrum signal causing a residual code phase lead error if the magnitude of the correlation product at the second selected code phase delay is more than twice the magnitude of the correlation product at the first selected code phase delay.

13. The invention of claim 10, wherein said error means further comprises:

means for determining that said received, code modulated spread spectrum signal is substantially free of multipath interference error if the magnitude of the correlation product at

the second selected code phase delay is substantially equal to the magnitude of the correlation product at the first selected code phase delay.

14. The invention of claim 1, wherein said comparison means further comprises:

means for selecting a prompt phase delay between said first and second code phase delays if the magnitude of the correlation product at the second selected code phase delay is less than twice the magnitude of the correlation product at the first selected code phase delay.

15. The invention of claim 1, wherein said comparison means further comprises:

means for selecting a prompt phase delay at a correlation product peak between said first and second code phase delays if the magnitude of the correlation product at the second selected code phase delay is less than twice the magnitude of the correlation product at the first selected code phase delay.

16. The invention of claim 1, wherein said comparison means further comprises:

means for selecting a prompt phase delay between said second and third code phase delays if the magnitude of the correlation product at the second selected code phase delay is more than twice the magnitude of the correlation product at the first selected code phase delay.

17. The invention of claim 1, wherein said comparison means further comprises:

means for selecting a prompt phase delay at a peak between said second and third code phase delays if the magnitude of the correlation product at the second selected code phase delay is more than twice the magnitude of the correlation product at the first selected code phase delay.

18. The invention of claim 1, wherein said comparison means further comprises:

means for selecting a prompt phase delay at said second code phase delay if the magnitude of the correlation product at the second selected code phase delay is substantially equal to the magnitude of the correlation product at the first selected code phase delay.

19. The invention of claim 1, further comprising:

means responsive to the comparison means for adjusting the code phase delay of a prompt correlation.

20. A method of processing coded, spread spectrum signals with potential multipath interference comprising the steps of:

generating a local replica of the code;

correlating the local replica with coded, spread spectrum signals as received at a plurality of code phase delays; and

determining prompt code phase delay from differences in magnitude between at least two of said correlations.

21. The method of claim 20, wherein the correlating step further comprises the step of:

correlating the local replica with the received signals at a first pair of code phase delays separated by a predetermined phase delay difference.

22. The method of claim 21, wherein the step of correlating at a pair of code delays further comprises the step of:

determining a second pair of code delays, separated by a predetermined phase delay difference, the magnitudes of the correlations at said second pair of code delays having a predetermined relationship.

23. The method of claim 22, wherein said first and second pair

of code delays include a common code delay.

24. The method of claim 23, wherein said first pair of code phase delays are separated by a code chip width and said second pair of code phase delays are separated by one half of a code chip width.

25. The method of claim 21 further comprising the step of:

selecting one of the first pair of code phase delays by determining a second pair of code phase delays, separated by a single code chip width, producing equal correlation magnitudes above a threshold value.

26. The method of claim 25, further comprising the step of:

selecting the other of the first pair of code phase delays to be equidistant between said second pair of code phase delays.

27. The method of claim 26, wherein the comparison step further comprises the step of:

determining the presence of multipath interference from the ratio of correlation product magnitudes at said first pair of code phase delays.

28. The method of claim 27, wherein the step of determining the presence of multipath interference further comprises the step of:

determining the presence of multipath interference if the ratio of correlation product magnitudes at said first pair of code phase delays is substantially different than two.

29. The method of claim 27, further comprising the step of:

adjusting one of the first pair of phase delays to be the prompt code phase delay in response to the difference between the ratio of the correlation products and two.